Inte Jional Application No
PCT/BE2005/000025

a. classification of subject matter INV. G21G1/00 G21K5/08 According to International Patent Classification (IPC) or to both national classification and IPC **B. FIELDS SEARCHED** Minimum documentation searched (classification system followed by classification symbols) G21G Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal C. DOCUMENTS CONSIDERED TO BE RELEVANT Citation of document, with indication, where appropriate, of the relevant passages Category ° Relevant to claim No. WO 02/101757 A (BUCKLEY KENNETH R; RUTH 1-4,6,7,Х THOMAS J (CA); UNIV ALBERTA THE UNIVERSITY 13 - 15OF) 19 December 2002 (2002-12-19) cited in the application pages 5-12 9-12 US 5 917 874 A (KOEHLER CONRAD ET AL) 1,7, 15-17 Х 29 June 1999 (1999-06-29) cited in the application column 2, line 36 - column 5, line 10 US 2001/040223 A1 (ITO YOSHIKO ET AL) Χ 1,4,15, 15 November 2001 (2001-11-15) cited in the application paragraphs [0027], [ 0028] 7,16 Α -/--Further documents are listed in the continuation of box C. Patent family members are listed in annex. ° Special categories of cited documents: "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the "A" document defining the general state of the art which is not considered to be of particular relevance invention "E" earlier document but published on or after the international "X" document of particular relevance; the claimed invention filing date cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such docu-"O" document referring to an oral disclosure, use, exhibition or ments, such combination being obvious to a person skilled in the art. "P" document published prior to the international filing date but later than the priority date claimed "&" document member of the same patent family Date of the actual completion of the international search Date of mailing of the international search report **2** 2. 05. 06 25 January 2006 Authorized officer Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016 Jandl, F

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C.(Continu	ation) DOCUMENTS CONSIDERED TO BE RELEVANT	· · · · · · · · · · · · · · · · · · ·
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X Y	BE 1 011 263 A (ION BEAM APPLIC SA) 1 June 1999 (1999-06-01) cited in the application page 4; figures 1,2	1,15 9-12
X	US 5 425 063 A (FERRIERI RICHARD A ET AL) 13 June 1995 (1995-06-13)	1,6,9, 11,15
A	cited in the application column 1, lines 15-20 column 5, lines 13-18 column 9, lines 30-55	2,5,10
X	US 4 800 060 A (GOLDRING ET AL) 24 January 1989 (1989-01-24) column 1, lines 6-21 column 3, line 1 - column 4, line 2; figures 1-6	1,4,7, 15-17
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Box II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)
This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:
1. Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:
2. Claims Nos.: because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).
Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)
This International Searching Authority found multiple inventions in this international application, as follows:
see additional sheet
As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:
Remark on Protest  The additional search fees were accompanied by the applicant's protest.  No protest accompanied the payment of additional search fees.

## FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

1. claims: 1-16

Invention 1: Claim 1-16
An irradiation cell for producing a radioisotope, comprising an insert of two separate metallic parts of different material, means for supplying and guiding a cooling medium, sealing means between the two parts, the assembly of the parts by bolts or welding. The form and the specific material of the parts are defined. A method for producing the insert.

2. claim: 17

The use of an irradiation cell before starting irradiation. The cavity is filled with less than 50% of the target material.

formation on patent family members

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cited in search report		Publication date	Patent family member(s)	Publication date
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US 5425063	Α	13-06-1995	NONE	
US 4800060	A 	24-01-1989	NONE	